

50704/KMO/B583

## SEQUENCE LISTING

(1) INFORMATION FOR SEQ ID NO. 1:

(i) LENGTH: 365 amino acids

(ii) MOLECULE TYPE: protein

(vi) ORIGINAL SOURCE:

(a)ORGANISM: Candida boidinii

Met	Gly	Lys	Ile	Val	Leu	Val	Leu	Tyr	Asp	Ala	Gly	Lys	His	Ala	Ala	
1				5					10					15		
Asp	Glu	Glu	Lys	Leu	Tyr	Gly	Cys	Thr	Glu	Asn	Lys	Leu	Gly	Ile	Ala	
			20					25					30			
Asn	Trp	Leu	Lys	Asp	Gln	Gly	His	Glu	Leu	Ile	Thr	Thr	Ser	Asp	Lys	
		35					40						45			
Glu	Gly	Glu	Thr	Ser	Glu	Leu	Asp	Lys	His	Ile	Pro	Asp	Ala	Asp	Ile	
	50					55					60					
Ile	Ile	Thr	Thr	Pro	Phe	His	Pro	Ala	Tyr	Ile	Thr	Lys	Glu	Arg	Leu	
65					70					75					80	
Asp	Lys	Ala	Lys	Asn	Leu	Lys	Leu	Val	Val	Val	Ala	Gly	Val	Gly	Ser	
				85					90						95	
Asp	His	Ile	Asp	Leu	Asp	Tyr	Ile	Asn	Gln	Thr	Gly	Lys	Lys	Ile	Ser	
			100					105						110		
Val	Leu	Glu	Val	Thr	Gly	Ser	Asn	Val	Val	Ser	Val	Ala	Glu	His	Val	
		115					120						125			
Val	Met	Thr	Met	Leu	Val	Leu	Val	Arg	Asn	Phe	Val	Pro	Ala	His	Glu	
	130					135					140					
Gln	Ile	Ile	Asn	His	Asp	Trp	Glu	Val	Ala	Ala	Ile	Ala	Lys	Asp	Ala	
145					150					155					160	
Tyr	Asp	Ile	Glu	Gly	Lys	Thr	Ile	Ala	Thr	Ile	Gly	Ala	Gly	Arg	Ile	
			165						170					175		

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Gly	Tyr	Arg	Val	Leu	Glu	Arg	Leu	Leu	Pro	Phe	Asn	Pro	Lys	Glu	Leu
			180					185					190		
Leu	Tyr	Tyr	Asp	Tyr	Gln	Ala	Leu	Pro	Lys	Glu	Ala	Glu	Glu	Lys	Val
			195				200					205			
Gly	Ala	Arg	Arg	Val	Glu	Asn	Ile	Glu	Glu	Leu	Val	Ala	Gln	Ala	Asp
	210					215					220				
Ile	Val	Thr	Val	Asn	Ala	Pro	Leu	His	Ala	Gly	Thr	Lys	Gly	Leu	Ile
225					230					235					240
Asn	Lys	Glu	Leu	Leu	Ser	Lys	Phe	Lys	Lys	Gly	Ala	Trp	Leu	Val	Asn
				245					250					255	
Thr	Ala	Arg	Gly	Ala	Ile	Cys	Val	Ala	Glu	Asp	Val	Ala	Ala	Ala	Leu
			260					265					270		
Glu	Ser	Gly	Gln	Leu	Arg	Gly	Tyr	Gly	Gly	Asp	Val	Trp	Phe	Pro	Gln
		275					280					285			
Pro	Ala	Pro	Lys	Asp	His	Pro	Trp	Arg	Asp	Met	Arg	Asn	Lys	Tyr	Gly
	290					295					300				
Ala	Gly	Asn	Ala	Met	Thr	Pro	His	Tyr	Ser	Gly	Thr	Thr	Leu	Asp	Ala
305					310					315					320
Gln	Thr	Arg	Tyr	Ala	Glu	Gly	Thr	Lys	Asn	Ile	Leu	Glu	Ser	Phe	Phe
				325					330					335	
Thr	Gly	Lys	Phe	Asp	Tyr	Arg	Pro	Gln	Asp	Ile	Ile	Leu	Leu	Asn	Gly
			340					345					350		
Glu	Tyr	Val	Thr	Lys	Ala	Tyr	Gly	Lys	His	Asp	Lys	Lys			
		355					360					365			

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(2) INFORMATION FOR SEQ ID NO. 2:

(i) LENGTH: 367 amino acids

(ii) MOLECULE TYPE: protein

(vi) ORIGINAL SOURCE:

(a)ORGANISM: Candida boidinii

Met	Gly	Lys	Ile	Phe	Asp	Tyr	Met	Glu	Lys	Tyr	Asp	Tyr	Glu	Gln	Leu
1				5					10					15	
Val	Met	Cys	Gln	Asp	Lys	Glu	Ser	Gly	Leu	Lys	Ala	Ile	Ile	Cys	Ile
			20					25					30		
His	Val	Thr	Thr	Leu	Gly	Pro	Ala	Leu	Gly	Gly	Met	Arg	Met	Trp	Thr
		35					40					45			
Tyr	Ala	Ser	Glu	Glu	Glu	Ala	Ile	Glu	Asp	Ala	Leu	Arg	Leu	Gly	Arg
	50					55					60				
Gly	Met	Thr	Tyr	Lys	Asn	Ala	Ala	Ala	Gly	Leu	Asn	Leu	Gly	Gly	Gly
65					70					75					80
Lys	Thr	Val	Ile	Ile	Gly	Asp	Pro	Arg	Lys	Asp	Lys	Asn	Glu	Ala	Met
			85						90					95	
Phe	Arg	Ala	Leu	Gly	Arg	Phe	Ile	Gln	Gly	Leu	Asn	Gly	Arg	Tyr	Ile
			100					105					110		
Thr	Ala	Glu	Asp	Val	Gly	Thr	Thr	Val	Glu	Asp	Met	Asp	Ile	Ile	His
		115					120					125			
Glu	Glu	Thr	Arg	Tyr	Val	Thr	Gly	Val	Ser	Pro	Ala	Phe	Gly	Ser	Ser
	130					135					140				
Gly	Asn	Pro	Ser	Pro	Val	Thr	Ala	Tyr	Gly	Val	Tyr	Arg	Gly	Met	Lys
145					150					155					160
Ala	Ala	Ala	Lys	Glu	Ala	Phe	Gly	Asp	Asp	Ser	Leu	Glu	Gly	Lys	Val
			165						170					175	
Val	Ala	Val	Gln	Gly	Val	Gly	His	Val	Ala	Tyr	Glu	Leu	Cys	Lys	His
			180					185					190		

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Leu	His	Asn	Glu	Gly	Ala	Lys	Leu	Ile	Val	Thr	Asp	Ile	Asn	Lys	Glu
		195					200					205			
Asn	Ala	Asp	Arg	Ala	Val	Gln	Glu	Phe	Gly	Ala	Glu	Phe	Val	His	Pro
	210					215					220				
Asp	Lys	Ile	Tyr	Asp	Val	Glu	Cys	Asp	Ile	Phe	Ala	Pro	Cys	Ala	Leu
225					230					235					240
Gly	Ala	Ile	Ile	Asn	Asp	Glu	Thr	Ile	Glu	Arg	Leu	Lys	Cys	Lys	Val
				245					250					255	
Val	Ala	Gly	Ser	Ala	Asn	Asn	Gln	Leu	Lys	Glu	Glu	Arg	His	Gly	Lys
			260					265					270		
Met	Leu	Glu	Glu	Lys	Gly	Ile	Val	Tyr	Ala	Pro	Asp	Tyr	Val	Ile	Asn
		275					280					285			
Ala	Gly	Gly	Val	Ile	Asn	Val	Ala	Asp	Glu	Leu	Leu	Gly	Tyr	Asn	Arg
	290					295					300				
Glu	Arg	Ala	Met	Lys	Lys	Val	Glu	Gly	Ile	Tyr	Asp	Lys	Ile	Leu	Lys
305					310					315					320
Val	Phe	Glu	Ile	Ala	Lys	Arg	Asp	Gly	Ile	Pro	Ser	Tyr	Leu	Ala	Ala
				325					330					335	
Asp	Arg	Met	Ala	Glu	Glu	Arg	Ile	Glu	Met	Met	Arg	Lys	Thr	Arg	Ser
			340					345					350		
Thr	Phe	Leu	Gln	Asp	Gln	Arg	Asn	Leu	Ile	Asn	Phe	Asn	Asn	Lys	
		355					360					365			

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(3) INFORMATION FOR SEQ ID NO. 3:

- (i) LENGTH: 640 amino acids
- (ii) MOLECULE TYPE: protein
- (vi) ORIGINAL SOURCE:
  - (a) ORGANISM: Candida boidinii

Met	Ala	Ser	Ala	Pro	Ile	Gly	Ser	Ala	Ile	Ser	Arg	Asn	Asn	Trp	Ala	
1				5					10					15		
Val	Thr	Cys	Asp	Ser	Ala	Gln	Ser	Gly	Asn	Glu	Cys	Asn	Lys	Ala	Ile	
			20					25					30			
Asp	Gly	Asn	Lys	Asp	Thr	Phe	Trp	His	Thr	Phe	Tyr	Gly	Ala	Asn	Gly	
			35				40					45				
Asp	Pro	Lys	Pro	Pro	His	Thr	Tyr	Thr	Ile	Asp	Met	Lys	Thr	Thr	Gln	
	50					55				60						
Asn	Val	Asn	Gly	Leu	Ser	Met	Leu	Pro	Arg	Gln	Asp	Gly	Asn	Gln	Asn	
65					70					75					80	
Gly	Trp	Ile	Gly	Arg	His	Glu	Val	Tyr	Leu	Ser	Ser	Asp	Gly	Thr	Asn	
				85					90					95		
Trp	Gly	Ser	Pro	Val	Ala	Ser	Gly	Ser	Trp	Phe	Ala	Asp	Ser	Thr	Thr	
			100					105					110			
Lys	Tyr	Ser	Asn	Phe	Glu	Thr	Arg	Pro	Ala	Arg	Tyr	Val	Arg	Leu	Val	
			115				120					125				
Ala	Ile	Thr	Glu	Ala	Asn	Gly	Gln	Pro	Trp	Thr	Ser	Ile	Ala	Glu	Ile	
			130			135					140					
Asn	Val	Phe	Gln	Ala	Ser	Ser	Tyr	Thr	Ala	Pro	Gln	Pro	Gly	Leu	Gly	
145					150					155					160	
Arg	Trp	Gly	Pro	Thr	Ile	Asp	Leu	Pro	Ile	Val	Pro	Ala	Ala	Ala	Ala	
				165					170					175		
Ile	Glu	Pro	Thr	Ser	Gly	Arg	Val	Leu	Met	Trp	Ser	Ser	Tyr	Arg	Asn	
			180					185					190			

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Asp	Ala	Phe	Gly	Gly	Ser	Pro	Gly	Gly	Ile	Thr	Leu	Thr	Ser	Ser	Trp
		195					200					205			
Asp	Pro	Ser	Thr	Gly	Ile	Val	Ser	Asp	Arg	Thr	Val	Thr	Val	Thr	Lys
	210					215					220				
His	Asp	Met	Phe	Cys	Pro	Gly	Ile	Ser	Met	Asp	Gly	Asn	Gly	Gln	Ile
225					230					235					240
Val	Val	Thr	Gly	Gly	Asn	Asp	Ala	Lys	Lys	Thr	Ser	Leu	Tyr	Asp	Ser
				245					250					255	
Ser	Ser	Asp	Ser	Trp	Ile	Pro	Gly	Pro	Asp	Met	Gln	Val	Ala	Arg	Gly
			260					265					270		
Tyr	Gln	Ser	Ser	Ala	Thr	Met	Ser	Asp	Gly	Arg	Val	Phe	Thr	Ile	Gly
		275					280					285			
Gly	Ser	Trp	Ser	Gly	Gly	Val	Phe	Glu	Lys	Asn	Gly	Glu	Val	Tyr	Ser
	290					295					300				
Pro	Ser	Ser	Lys	Thr	Trp	Thr	Ser	Leu	Pro	Asn	Ala	Lys	Val	Asn	Pro
305					310					315					320
Met	Leu	Thr	Ala	Asp	Lys	Gln	Gly	Leu	Tyr	Arg	Ser	Asp	Asn	His	Ala
				325					330					335	
Trp	Leu	Phe	Gly	Trp	Lys	Lys	Gly	Ser	Val	Phe	Gln	Ala	Gly	Pro	Ser
			340					345					350		
Thr	Ala	Met	Asn	Trp	Tyr	Tyr	Thr	Ser	Gly	Ser	Gly	Asp	Val	Lys	Ser
		355					360					365			
Ala	Gly	Lys	Arg	Gln	Ser	Asn	Arg	Gly	Val	Ala	Pro	Asp	Ala	Met	Cys
	370					375					380				
Gly	Asn	Ala	Val	Met	Tyr	Asp	Ala	Val	Lys	Gly	Lys	Ile	Leu	Thr	Phe
385					390					395					400
Gly	Gly	Ser	Pro	Asp	Tyr	Gln	Asp	Ser	Asp	Ala	Thr	Thr	Asn	Ala	His
				405					410					415	
Ile	Ile	Thr	Leu	Gly	Glu	Pro	Gly	Thr	Ser	Pro	Asn	Thr	Val	Phe	Ala
			420					425					430		

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Ser	Asn	Gly	Leu	Tyr	Phe	Ala	Arg	Thr	Phe	His	Thr	Ser	Val	Val	Leu
		435					440					445			
Pro	Asp	Gly	Ser	Thr	Phe	Ile	Thr	Gly	Gly	Gln	Arg	Arg	Gly	Ile	Pro
	450					455					460				
Phe	Glu	Asp	Ser	Thr	Pro	Val	Phe	Thr	Pro	Glu	Ile	Tyr	Val	Pro	Glu
465					470					475					480
Gln	Asp	Thr	Phe	Tyr	Lys	Gln	Asn	Pro	Asn	Ser	Ile	Val	Arg	Val	Tyr
				485					490					495	
His	Ser	Ile	Ser	Leu	Leu	Leu	Pro	Asp	Gly	Arg	Val	Phe	Asn	Gly	Gly
			500					505					510		
Gly	Gly	Leu	Cys	Gly	Asp	Cys	Thr	Thr	Asn	His	Phe	Asp	Ala	Gln	Ile
		515					520					525			
Phe	Thr	Pro	Asn	Tyr	Leu	Tyr	Asn	Ser	Asn	Gly	Asn	Leu	Ala	Thr	Arg
	530					535					540				
Pro	Lys	Ile	Thr	Arg	Thr	Ser	Thr	Gln	Ser	Val	Lys	Val	Gly	Gly	Arg
545					550					555					560
Ile	Thr	Ile	Ser	Thr	Asp	Ser	Ser	Ile	Ser	Lys	Ala	Ser	Leu	Ile	Arg
				565					570					575	
Tyr	Gly	Thr	Ala	Thr	His	Thr	Val	Asn	Thr	Asp	Gln	Arg	Arg	Ile	Pro
			580					585					590		
Leu	Thr	Leu	Thr	Asn	Asn	Gly	Gly	Asn	Ser	Tyr	Ser	Phe	Gln	Val	Pro
		595					600					605			
Ser	Asp	Ser	Gly	Val	Ala	Leu	Pro	Gly	Tyr	Trp	Met	Leu	Phe	Val	Met
	610					615					620				
Asn	Ser	Ala	Gly	Val	Pro	Ser	Val	Ala	Ser	Thr	Ile	Arg	Val	Thr	Gln
625					630					635					640